

SWALLOW.
A NEW
ALMANACK

for the Year of our
LORD GOD.

1680.

Being Bissextile or Leap-year, and
from the Worlds Creation,
3683.

Calculated properly for the famous
University and Town of Cambridge.

Where the Pole Artick is elevated 52 degrees
and 17 minutes above the Horizon.

Omnia falce metit tempus.

CAMBRIDGE,

Printed by John Hayes, Printer to
the University, 1680.

The Common Notes and Moveable Feasts in both accounts, for the year of our Lord God 1680.

Julian or
Englsh.

Gregorian
or Foreign.

	9	The Golden Number	9
	9	The Cycle of the Sun	9
	9	The Epact	29
	DO	The Dominical Letter	OF
Feb.	22	Shrove-sunday	March 3
April	11	Easter day	April 21
May	20	Ascension-day	May 30
May	30	Whitunday	June 9
June	6	Trinity-sunday	June 16
Novem.	28	Advent-sunday	Decemb. 1

The Anatomy of Mans body.



- | | |
|---------------------------|--------------------------|
| ♈ Aries Head and Face | ♎ Libra Reins and Loyns |
| ♉ Taurus Neck & Throat | ♏ Scorpio Secret members |
| ♊ Gemini Arms and Shoul. | ♐ Sagittarius the Thighs |
| ♋ Cancer Breast and Stom. | ♑ Capricornus the Knees |
| ♌ Leo Heart and Back | ♒ Aquarius the Legs |
| ♍ Virgo Bowels and Belly | ♓ Pisces the Feet. |

Swallow 1680.

The Terms with their Returns.

Hilary Term begins Janu-
ary 23, and ends February
12, and hath 4 returns, viz. {

Octab. Hilar. Jan. 20
Quind. Hilar. Jan. 27
Craft. Purif. Febr. 3
Octab. Purif. Febr. 9

Easter Term begins April
28 ends May 24 and hath 5
returns, viz.

{ Quind. Pasch. April. 26
Tres Pasch. May 3
Mens. Pasch. May 10
Quind. Pasch. May 17
Craft. Ascen. May 21

Trinity Term begins June 11
and ends June 30, and hath 4
returns, viz.

{ Craft. Trin. June 7
Octab. Trin. June 14
Quind. Trin. June 21
Tres Trin. June 28

Michaelmas Term begins
October 2; ends November
19 and hath 6 returns, viz.

{ Tres Mich. Octob. 20
Mens. Mich. Octob. 27
Craft. anim. Nov. 3
Craft. Mart. Nov. 12
Octab. Mart. Nov. 18
Quind. Mart. Nov. 25

Note that the Exchequer openeth 8 days before any Term begins, except the Term of Trinity, in which it openeth but 4 days before.

Note also that the splendid Planet *Venus*, will this year be our bright Morning Star, from the beginning of the year unto the 26 of *August*, at which time making her Conjunction with the Sun, she becomes Occidental, and our Evening Star the remaining part of the year.

Swallow 1680.

A Regal Table in a more exact manner

<p>The Year, Month, and Day. (accounting the Year to begin Jan. 1.) whereon every K. and Q. of Eng. since the Conq. began their reign.</p>	<p>The number of Years, Months, & Days, that every K. & Q. reign. 28 da. to a mon.</p>	<p>The num. of y. expired in this y. since they began to reign: as also since they ended.</p>
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K. W. Conq.	1066	Octob. 14	20 y	11 m	22 d	614	
W. Rufus	1087	Sept. 9	12 y	11 m	18 d	593	W Conq.
Henry	1100	August 2	33 y	4 m	11 d	580	W. Rufus
Stephen	1134	Decem. 1	18 y	11 m	18 d	545	Henry
Henry	1154	Octob. 25	34 y	9 m	2 d	526	Stephen
Richard	1189	July 6	9 y	9 m	0 d	491	Henry
John	1199	April 6	17 y	7 m	0 d	481	Richard
Henry	1216	Octob. 19	56 y	1 m	0 d	464	John
Edward	1272	Nov. 16	34 y	8 m	6 d	408	Henry
Edward	1307	July 7	19 y	7 m	5 d	373	Edward
Edward	1327	Jan. 25	50 y	5 m	7 d	354	Edward
Richard	1377	June 21	22 y	3 m	14 d	303	Edward
Henry	1399	Sept. 29	13 y	6 m	3 d	281	Richard
Henry	1413	Marc. 20	9 y	5 m	24 d	267	Henry
Henry	1422	Aug. 31	38 y	6 m	16 d	258	Henry
Edward	1461	March 4	22 y	1 m	8 d	220	Henry
Edward	1483	April 9	0 y	2 m	18 d	197	Edward
Richard	1483	June 22	2 y	2 m	5 d	197	Edward
Henry	1485	Aug. 21	23 y	10 m	24 d	195	Richard
Henry	1509	April 21	37 y	10 m	2 d	171	Henry
Edward	1547	Jan. 28	6 y	5 m	19 d	134	Henry
Q. Mary	1553	July 6	5 y	4 m	22 d	127	Edward
Q. Elizab.	1558	Nov. 17	44 y	4 m	15 d	122	Q. Mary
K. James	1603	Mar. 24	22 y	0 m	3 d	78	Q. Elizab.
Charles	1625	Mar. 27	22 y	10 m	3 d	55	K. James
Charles	1649	Jan. 30	Longlive the King			31	K. Charles 1

The use of this Table in Example.

King Henry 8 began his Reign in the year of Christ 1509, April 22. He Reigned 37 years, 10 moneths, and a days. It is since he began his Reign 171 years compleat the 22 of April this year 1680. Now to know the time since the end of his Reign, before his name standing on the right hand, you shall there find 134 years since he died, January 28. And so of the rest.

January

January hath xxxi days.

Full moon 5 day, 7 min. past 10 at night

Last quarter 13 day, 4 min. past 7 at night

New moon 21 day 1 in the afternoon

First quarter 28 day, 21 min. past 8 in the morning.

1	a	Circumcision	Taur.	23	21	19	
2	b	Oct. Stephen	Gem.	8	22	20	Thick cloudy
3	c	Octab. John		22	23	21	weather like
4	d	2 Sun. af. Chr.	Canc.	6	24	22	to snow and
5	e	Siméon		19	25	23	cold.
6	f	Epiphany	Leo	3	26	24	Not very
7	g	Julian		16	27	26	cold now.
8	a	Lucian		29	28	27	
9	b	Marcelline	Virgo	11	29	28	Indifferent
10	c	Sun in Aqua.		24	0	30	warm for the
11	d	1 aft. Epiph.	Libra	6	1	31	season with
12	e	Arcadius		18	2	32	high winds &
13	f	Hillary Bish.		29	3	33	likely much
14	g	Felix	Scorp.	11	4	34	rain or snow.
15	a	Marcellus		23	5	35	
16	b	Marcellus	Sagit.	5	6	36	
17	c	Anthony		18	7	37	
18	d	2 aft. Epiph.	Capr.	0	8	38	Variable
19	e	Wolstan		13	9	39	weather, very
20	f	Octab. Hilar.		27	10	40	dark air and
21	g	Agnes Virg.	Aquar.	11	11	41	turbulent.
22	a	Vincent M.		25	12	42	
23	b	Term begins	Pisc.	9	13	43	
24	c	Timothy B.		23	14	44	Temperate
25	d	Conv. S. Paul	Aries	8	15	45	weather.
26	e	Polycarpus		22	16	46	Cold rain or
27	f	Quind. Hilar.	Taur.	6	17	46	snow.
28	g	Agnes Appa.		20	18	47	Cloudy wea-
29	a	Gildas Ab.	Gem.	4	19	48	ther, not much
30	b	M. Char. Mar.		18	20	48	frost this
31	c	Saturn	Canc.	2	21	49	moneth.

February hath xxix days.

Full moon the 4 day, 48 min. past 1 afternoon
 Last quarter the 12 day, 13 min. past 5 in the afternoon.
 New moon 10 day, 53 min. after 12 in the morning
 First quarter the 16 day, 40 min. past 4 afternoon.

N.D.	W.D.	Festival days with Terms	Moons place.	Su. pl. d. m.	Inclination of the air.
1	d	4 th Epiph.	Canc. 15	22 50	Fine mild weather at the beginning and so like to continue for some days.
2	e	Purification	29	23 51	
3	f	Craft. Purif.	Leo 12	24 51	
4	g	Gilbertus	25	25 52	
5	a	Agatha M.	Virgo 7	26 52	
6	b	Dorothea M.	10	27 53	Windy with hail or snow.
7	c	Rumwald	Libra 2	28 53	
8	d	Septuagesima	14	29 54	
9	e	Oct. p.	26	0 54	
10	f	Scholastica	Scorp. 7	1 55	
11	g	Bother	19	2 55	Still warm for the season.
12	a	Term ends	Sagit. 1	3 55	
13	b	Agabus	13	4 56	
14	c	Valentine	26	5 56	
15	d	Sexagesima	Capr. 8	6 56	
16	e	Iulianus	21	7 57	Like to freez now but con- tinues not.
17	f	Constant	Aquar. 5	8 57	
18	g	Concordia	19	9 57	
19	a	Habine	Pisces 3	10 57	
20	b	Wildred, vir.	18	11 57	
21	c	Embert	Aries 3	12 57	About this time expect cold sharp air with wind & snow toward the latter end of the moneth.
22	d	Quinquages.	18	13 57	
23	e	Polycarpus	Taur. 2	14 57	
24	f	Shr. wald. fast	17	15 57	
25	g	S. Mat. Ash.	Gem. 1	16 57	
26	a	Wigorn	15	17 57	
27	b	Fortunatus	29	18 57	
28	c	Osward Bish.	Canc. 12	19 57	
29	d	1 Sun. in Lent	25	20 56	

March hath xxxi days,

Full moon 5 day, 56 min. past 5 in the morning
 Last quart. 13 day, 24 min. after 11 in the morning
 New moon 20 day, 44 min. after 10 in the morning
 First quarter 27 day, 14 min. past 2 in the morning.

1	D	David Bish.	Leo	8	21	56	
2	E	Chad Bish.		21	22	56	This mone:h
3	F	Ember week	Virgo	4	23	56	begins with
4	G	Adrian		16	24	55	Wholesome
5	A	Eusebius		28	25	55	winds and
6	H	Frederick	Libra	10	26	54	rain.
7	C	2 Sun. in lent		22	27	54	
8	D	Marcellian	Scorp.	4	28	53	
9	E	40 Martyrs		16	29	53	
10	F	Sun in Aries		28	0	52	Cold cloudy
11	G	Gregory	Sagitt	10	1	52	weather and
12	A	Odwin		22	2	51	like to be
13	H	Wigan	Capr.	4	3	50	much rain
14	C	1 fund. in lent		16	4	50	about this
15	D	Longine		29	5	49	time mixt
16	E	Alrede Ab.	Aquar.	13	6	48	with snow.
17	F	Patrick		27	7	47	Windy and
18	G	Edward R.	Pisces	11	8	46	serene air
19	A	Joseph		26	9	45	now.
20	H	Wupertus	Aries	11	10	44	High winds
21	C	Midlent Sun.		26	11	43	and cold boi-
22	D	Sphzobian	Taur.	11	12	42	sterous wea-
23	E	Theodore		25	13	41	ther.
24	F	Quirin fast.	Gem.	11	14	40	
25	G	Lady day		29	15	39	Cold abated
26	A	Castalus	Canc.	9	16	38	tempestous
27	H	Archibald		21	17	37	with thunder.
28	C	5 Sun. in Len.	Leo	5	18	36	
29	D	Enlach		15	19	34	Variable and
30	E	Patrone B.	Virgo	0	20	33	uncertain
31	F	Guidz		13	21	32	weather.

April hath xxx days.

Full moon 3 day, 29 min. past 11 at night
 Last quarter 12 day, 40 min. after 12 in the morning
 New moon 18 day, 56 min. past 6 at night
 First quarter, 25 day, 10 min. past 1 in the afternoon.

1	B	Theodosius	Virgo	25	22	30	
2	a	Francis C.	Libra	7	23	29	Warm show-
3	b	Richard B.		19	24	27	ers and good
4	c	Palm Sunday	Scorp.	1	25	26	seasonable
5	d	Vincent		13	26	24	weather.
6	e	Egeasus		25	27	23	
7	f	Celestine	Sagit	6	28	21	High winds
8	B	Dionisus		18	29	20	and hail.
9	a	Good friday	Capr.	1	08	18	
10	b	Eschillus		13	1	16	A turbid and
11	c	Easter day		25	2	15	moist air, but
12	d	Vulsius	Aquar.	8	3	13	temperate.
13	e	Eibertus		22	4	11	
14	f	Olympia	Pisc.	5	5	9	
15	B	Tian Oswald		20	6	7	
16	a	Idoaze	Aries	4	7	6	
17	b	Antetus M.		19	8	4	Cold rainy
18	c	Low Sunday	Taur.	5	9	2	slabby wea-
19	d	Alphege		20	10	0	ther about
20	e	Ceadwa'd	Gem.	5	10	58	this time.
21	f	Simcon		19	11	56	
22	B	Sother	Canc.	4	12	54	
23	a	S. GEORGE		18	13	52	Still cold in-
24	b	Albertus	Leo	2	14	49	clining to
25	c	S. Mar. Evan.		15	15	47	drinels, and
26	d	Quind. Pasc.		27	16	45	so continues
27	e	Walburg	Virgo	10	17	43	to the end of
28	f	Term begins		22	18	41	the month.
29	B	Peter Mart.	Libra	4	19	38	
30	a	Erhenwald		16	20	36	

May hath xxxi days.

Full moon 3 day, 43 min. past 3 afternoon

Last quarter 11 day, 53 min. past 10 before noon

New moon 18 day, 16 min. past 2 in the morning

First quarter 25 day, 31 min. past 2 in the morning.

1	b	Phil. & Jac	Libra	28	21	34	
2	c	3 Sun. af. East.	Scorp.	10	22	32	Warm for the season with thunder.
3	d	Tres Pasch.		22	23	29	
4	e	Monica	Sagit	3	24	27	
5	f	Aligbe		15	25	24	
6	g	Joh. Port. Lar.		28	26	22	
7	a	John of Bev.	Capr.	10	27	20	Not much al- teration till about the 11 day.
8	b	Apparit. Mich.		22	28	17	
9	c	4 Sun. af. East.	Aquar.	5	29	15	
10	d	Sun. in Gem.		18	01	12	
11	e	Anthony	Pisc.	1	1	9	Now expect more tem- perate wea- ther.
12	f	Cozbian		15	2	7	
13	g	Servatus		29	3	4	
14	a	Boniface, M.	Aries	13	4	2	
15	b	Agatha		28	4	59	
16	c	Rogation Sun.	Taur.	13	5	57	Warm show- ers.
17	d	Quinq. Pasch.		28	6	54	
18	e	Deswald Bif.	Gem.	13	7	51	
19	f	Bernard		28	8	49	
20	g	Ascens. day	Cane.	13	9	46	Hot weather and like to
21	a	Craft. Ascen.		27	10	43	
22	b	Adelme	Leo	10	11	40	thunder.
23	c	Sun. afr. Asc.		23	12	38	
24	d	Term ends	Virg.	6	13	35	Not very good for the season.
25	e	Urban		19	14	32	
26	f	Bustin B. C.	Libra	1	15	29	Not very hot toward the latter end, but
27	g	Beda ven.		13	16	27	
28	a	Jonas Ab.		25	17	24	grows more temperate
29	b	K. Char. 2 N.	Scorp.	6	18	21	
30	c	Whitfunday		18	19	18	firing the season.
31	d	Petronella	Sagit.	0	20	15	

June hath xxx days.

Full moon the 2 day, 27 min. past 6 in the morning
 Last quarter the 9 day, 16 min. past 6 at night
 New moon the 16 day, 21 min. past 9 in the morning
 First quarter the 23 day, 2 min. past 6 at night.

1	e	Samphilus	Sagit.	12	21	13	
2	f	Ember Week		24	22	10	This moneth
3	g	Marcelline	Capr.	7	23	7	begins with
4	a	Petroch		19	24	4	good weather.
5	h	Bonifage	Aquar.	2	25	1	
6	c	Trinity Sund.		15	25	58	Fine gentle
7	d	Craft. Trin		28	26	55	rain to refresh
8	e	William B.Y.	Pisces	11	27	52	the tender
9	f	Delagia		25	28	49	plants.
10	g	Corp. Christi	Aries	9	29	46	
11	a	S. Barnabas	Term be.		05	43	Hot weather
12	h	Blandine	Taur	7	1	40	with thunder
13	c	1 Sun. af. Trin.		22	2	37	and lightning
14	d	Octab. Trin.	Gem.	7	3	35	but good sea-
15	e	Modestus		22	4	32	sonable wea-
16	f	Richard	Canc.	6	5	29	ther.
17	g	Botolph		21	6	26	
18	a	Marcus	Leo	5	7	23	
19	h	Gervasius		18	8	20	Very hot and
20	c	2 Sun. af. Trin.	Virg.	2	9	17	dry.
21	d	Quind. Trin.		14	10	14	
22	e	Alban		27	11	11	
23	f	Gracelin	Libra	9	12	8	More tem-
24	g	S. John Bapt.		21	13	5	perate at the
25	a	Ray Bishop	Scorp.	3	14	2	latter part of
26	h	Job. & Paul		15	14	59	the moneth
27	c	3 Sun. af. Trin.		26	15	56	but windy
28	d	Tref. Trip.	Sagit.	8	16	53	with show-
29	e	S. Peter Apo.		21	17	50	ers now and
30	f	Term ends	Capri.	3	18	48	then.

July hath xxxi days,

Full moon 1 day, 29 min. past 7 at night
 Last quarter 9 day, 1 min. after 12 in the morning
 New moon 15 day, 29 min. past 6 at night
 First quarter 23 day, 14 min. past 11 before noon
 Full moon 31 day, 11 min. past 7 in the morning.

1	G	Romwald B.	Capr.	16	19 45	Showry weather with thunder, but not very hot considering the season.
2	a	Visit Mary		29	20 42	
3	b	Macinbas	Aqua.	12	21 39	
4	C	4 Sun. of Trin.		25	22 36	
5	d	Anselmus	Pisces	8	23 33	
6	e	Gerburgara		22	24 30	
7	f	Demetrius	Aries	6	25 28	
8	G	Grambold A.		20	26 25	Very hasty showers had for hay time and harvest.
9	a	Wilburg	Taur.	4	27 22	
10	b	Sev. Brethren		18	28 19	
11	C	5 Sun. of Trin.	Gem.	2	29 16	
12	d	Sun. in Leo		16	30 14	
13	e	Anacletus	Canc.	1	1 11	
14	f	Benavent.		35	2 8	
15	G	Swithin B.		29	3 5	Good temperate weather about this time.
16	a	Almond	Leo	13	4 3	
17	b	Eleusius		26	5 0	
18	C	6 Sun. of Trin.	Virg.	10	5 57	
19	d	Dog days be.		22	6 54	
20	e	Margaret	Libra	5	7 52	
21	f	Mary Mag.		17	8 49	
22	G	Daniel		29	9 47	High winds with rain but very variable and uncertain.
23	a	Spollinarius	Scorp.	11	10 44	
24	b	Christina fa.		23	11 41	
25	C	S. James Ap.	Sagit.	4	12 39	
26	d	Anna		16	13 36	
27	e	Bartholomew		29	14 34	
28	f	Celsus	Capr.	11	15 31	
29	G	Bartha		24	16 29	
30	a	Abdon	Aquar.	7	17 26	
31	b	Ignatius		20	18 24	

August hath xxxi days:

Last quarter 7 day, 17 min. past 5 in the morning
 New moon 14 day, 28 min. past 5 in the morning
 First quarter 22 day, 50 min. past 2 in the morning
 Full moon 29 day, 54 min. past 5 in the afternoon.

1	C	Lammas day	Pisces	4	19	21	A temperate serene air with fine gales of wind.
2	D	Stephen M.		18	20	19	
3	E	Invent. Steph	Aries	2	21	17	
4	F	Bristarchus		16	22	14	
5	G	Oswald	Taur.	0	23	12	
6	A	Trans. Chr.		14	24	10	
7	B	Donatus		18	25	7	Good weather for harvest.
8	C	9 aft. Trin.	Gem.	12	25	5	
9	D	Romanus		25	27	3	
10	E	Laurence	Canc	10	28	1	
11	F	Citus		24	28	59	
12	G	Clare Virg.	Leo	8	29	57	
13	A	Sun in Virgo		22	ony	54	Moist weather and not very hot.
14	B	Eusebius	Virg.	5	1	52	
15	C	10 aft. Trin.		18	2	50	
16	D	Roche M.	Libra	0	3	48	
17	E	Wammes		13	4	46	
18	F	Helena Emp.		25	5	44	
19	G	Sebold	Scorp.	7	6	42	A good tem- perate season and pleasant weather and continues to the end with some thunder.
20	A	Bernard		19	7	41	
21	B	Richard Bif.	Sagit.	0	8	39	
22	C	11 aft. Trin.		12	9	37	
23	D	Jacobs fast		24	10	35	
24	E	S. Barthol.	Capr.	7	11	33	
25	F	Lewis King		19	12	32	
26	G	Trenous	Aquar.	2	13	30	
27	A	Dog days end		15	14	28	
28	B	Augustine		29	15	27	
29	C	12 aft. Trin.	Pisces	13	16	25	
30	D	Felts		27	17	23	
31	E	Adrian	Aries	11	18	22	

September hath xxx days.

Last quarter 5 day, 54 min. past 10 in the morning
 New moon 12 day, at 21 min. past 7 at night
 First quarter 20 day, 54 min. past 10 at night
 Full moon 28 day, 51 min. past 3 in the morning.

1	f	Stiles Abbot	Aries	26	19	30	
2	B	Heraphia	Taur.	11	20	19	Stormy weather as hail, &c. begins the month, but grows more calm quickly.
3	a	Lupus		25	21	18	
4	b	Trans. Cuthb.	Gem.	9	22	16	
5	C	13 aft. Trin.		23	23	15	
6	D	Magnus	Canc.	7	24	13	
7	e	Trans. Dunst.		21	25	12	
8	f	Nat. of Mary	Leo	4	26	11	
9	B	Gozgontius		18	27	10	
10	a	Nicholas	Virgo	1	28	8	Moist weather and mising.
11	b	Jacynthus		14	29	7	
12	C	Sun in Libra		26	0	6	
13	D	Amatus	Libra	9	1	5	Variable weather.
14	e	Exalt. Crucis		21	2	4	
15	f	Ember week	Scorp.	3	3	3	
16	B	Cornelius		15	4	2	
17	a	Stephen		27	5	1	Warm with wind or rain.
18	b	Winock	Sagit.	9	6	0	
19	C	15 aft. Trin.		20	6	59	
20	D	Eustachius	Capr.	2	7	59	
21	e	S. Matthew		15	8	58	
22	f	Maurice		27	9	57	
23	B	Linus	Aquar.	10	10	56	
24	a	Winebald		23	11	56	
25	b	Crofride	Pisc.	7	12	55	Cold rain at the end.
26	C	16 aft. Trin.		21	13	55	
27	D	Col. & Dam.	Aries	5	14	54	
28	e	Rooba		20	15	53	
29	f	S. Mich Arch.	Taur.	5	16	53	
30	B	Merome		20	17	53	

October hath xxxi days.

Last quarter 4 day, 50 min. past 6 afternoon
 New moon 11 day, 54 min. past 11 before noon
 First quarter 20 day, 36 min. past 3 afternoon
 Full moon 27 day, 46 min. past 1 afternoon.

1	a	Remigius	Gem.	5	18	52	
2	b	Andreas		20	19	52	
3	c	17 Su. af. Trin.	Canc.	4	20	51	
4	d	Francis		18	21	51	Tempestuous and Windy air.
5	e	Matthias	Leo	1	22	51	
6	f	Bruno		15	23	51	
7	g	Mark		28	24	50	
8	a	Demetrius	Virg.	10	25	50	Cold rain and dark clouds.
9	b	Dionysius		23	26	50	
10	c	18 Su. af. Trin.	Libra	5	27	50	
11	d	Matthias		18	28	50	
12	e	Wolfrid		27	29	50	
13	f	Sun in Scorp.	Scorp.	11	cm	50	The cold still continues. Winterlike weather you must ex- pect.
14	g	Calixtus		23	1	50	
15	a	Ceresia	Sagitt.	5	2	50	
16	b	Gallas		17	3	50	
17	c	19 Su. af. Trin.		29	4	50	
18	d	S. Luke Evan.	Capr.	11	5	50	
19	e	Stolomp		23	6	51	
20	f	Tres. Mich.	Aqua.	6	7	51	
21	g	Hilarton		18	8	51	
22	a	Cordula	Pisc.	1	9	51	
23	b	Terrence		15	10	52	
24	c	20 af. Trin.		29	11	52	Much rain, ex- pect now very slabby wea- ther and so continues cloudy with winds.
25	d	Crispine	Aries	13	12	53	
26	e	Bartholomew		28	13	53	
27	f	Mens. mich. fa.	Taur.	13	14	53	
28	g	Sim. & Jude		29	15	54	
29	a	Smaragdus	Gem.	14	16	54	
30	b	Agelnoth		29	17	55	
31	c	21 Su. af. Trin.	Canc.	14	18	56	

November hath xxx days.

Last quarter 3 day, 5 min. past 6 in the morning
 New moon 11 day, 30 min. past 6 in the morning
 First quarter 19 day, 21 min. past 6 in the morning
 First quarter 25 day, 35 min. past 11 at night.

1	d	All Saints	Canc.	28	19	56	
2	e	All souls	Leo	11	20	57	Cold frosty
3	f	Craft. anim.		25	21	57	weather and
4	g	Vitalis	Virg.	7	22	58	sharp air you
5	a	Powder plot		20	23	59	may now
6	b	Leonard	Libra	2	25	0	expect.
7	c	21 Su. af. Trin.		14	26	0	
8	d	Sebertus		25	27	1	Great winds
9	e	Clement	Scorp.	8	28	2	with hail.
10	f	Crithon		20	29	2	
11	g	Sun in Sagit.	Sagit.	2	0	4	
12	a	Craft. Mart.		14	1	5	
13	b	Williamus		26	2	6	
14	c	23 Su. af. Trin.	Capr.	8	3	7	
15	d	Arnold		10	4	7	Winterlike
16	e	Edmond	Aquar.	2	5	8	weather.
17	f	Clement		15	6	10	
18	g	Octab. Mart.		28	7	11	
19	a	Pontion	Pisces	11	8	12	
20	b	Edmond K.		24	9	13	
21	c	24 after Trin.	Aries	8	10	14	
22	d	Cicely Virg.		22	11	15	
23	e	Clement	Taur.	7	12	16	
24	f	Chrylogonus		22	13	17	Very windy
25	g	Quind. Mart.	Gem.	7	14	18	weather but
26	a	Peter B. M.		22	15	19	not very cold
27	b	Oba Virg.	Canc.	7	16	20	and so it ends
28	c	Advent Sund.		22	17	22	the month.
29	d	Term ends	Leo	6	18	23	
30	e	S. Andrew		10	19	24	

December hath xxxi days.

Last quarter 1 day, 16 min. past 9 at night
 New moon 11 day, 17 min. past 2 in the morning
 First quarter 18 day, 44 min. past 6 at night
 Full moon 25 day, 11 min. past 10 in the morning.

1	f	Bibiana	Virgo	4	20	25	
2	u	Lucius King		17	21	26	Not very cold for the season.
3	a	Cassianus		29	22	28	
4	b	Barbara	Libra	11	23	29	
5	c	1 sun. Adv.		23	24	30	Dark cloudy weather and like to snow.
6	d	Nicholas	Scorp.	5	25	31	
7	e	Embose		17	26	33	
8	f	Conce. of M.		29	27	34	Cold now encreases.
9	g	Leocadia	Sagitt.	11	28	35	
10	a	Damascus		22	29	37	
11	b	Sun in Capri.	Capr.	5	30	38	
12	c	3 sun. in Ad.		17	1	39	
13	d	Lucia		29	2	41	Wind and snow. Variable wea- ther.
14	e	Abraham	Aqua.	12	3	42	
15	f	Ember week		25	4	43	
16	g	O Sapiencia	Pisces	7	5	44	
17	a	Egerius		20	6	46	
18	b	Winebald	Aries	4	7	47	
19	c	4 sun. in Ad.		18	8	48	
20	d	Julius fast	Taur.	2	9	50	
21	e	S. Thomas		16	10	51	
22	f	30 Martyrs	Gem.	1	11	52	
23	g	Victoria		15	12	54	
24	a	W. d. & e. fast	Canc.	0	13	55	Rain like. Expect frost and snow about Christi- mas,
25	b	Christ's birth		16	14	56	
26	c	S. Stephen	Leo	0	15	58	
27	d	S. John		15	16	59	
28	e	Innocents		29	18	0	
29	f	Crescens	Virgo	12	19	1	
30	g	David K.		25	20	3	
31	a	Elthester.	Libra	8	21	4	

S W A L L O W.

The latter part of this
ALMANACK
for the Year of our
LORD GOD

1680.

Being the Bissextile or Leap-year,
and from the Conquest of Eng-
land by William Duke of
Normandy 614 years.

Wherein are contained an account of the
Eclipses, the times of the Sun's entering
into the four Cardinal Signs, many neces-
sary notions, together with pleasant and
usefull Tables for the Weights and Mea-
sures of several Commodities, and an ex-
act Table of Board and Timber measure,
with other things very profitable, and de-
lightfull.

*Poma das Autumnum: formosa est messibus Aestas:
Ver praebet flores: Igne leuatur Hyems.*

CAMBRIDGE,

Printed by John Hayes, Printer to the
University, 1680.

Swallow 1680.

Of the Eclipses this year.

THere will be but two Eclipses this year and both those of the glorious Sun the chiefest Luminary.

The first happeneth, *March* the 20 at 10 in the morning the Sun being then about the 11 degree of *Aries*, it is an Eclipse great in it self, being near the South Node of the Moon, and may in some measure be visible to us, but it will be totall to such as inhabit the South parts of *America*, the *Holy Island*, *Cape of S Vincent*, &c.

The second Eclipse will happen, *September* the 12, at 8 at night, and so no way visible to us, but to such as navigate near the Port of *S Peter*, &c. it will appear a great Eclipse.

Of the Suns Entrance into the four Cardinal Signs this year.

HE enters *Aries* *March* 9, 10 min. past 3 afternoon at which time our Spring quarter begins.

He enters *Cancer* *June* the 10, at 6 afternoon, and then begins our Summer quarter.

He enters *Libra* *September* the 12, 20 minutes past 9 before noon, and then our Autumn quarter begins.

He enters *Capricorn* *December* the 10. at 9 at night, and then our Winter quarter begins.

Thus

Thus having given an account of the Eclipses and the times the Sun enters into the Cardinal Signs. I shall now give you some general directions, usefull notions, together with pleasant and easie Tables, for the weights and measures of most commodities now traded with in *England*.

All measures of application or length are denominated from the parts of the body, as the Palm, the Foot, and the like, but are indeed in *England* taken from the Yard Standard kept in *Guild Hall* in *London*, of which the third part is a foot, and the 36 an inch. Set down in the first Table from an inch to a mile.

Now although the Table is so easie that I presume there are but few but will understand it at first sight, yet for the benefit of those that do not; I shall as briefly as I can explain it.

This Table consists of several columns: and may be considered, either as to the columns or spaces between line and line from top to bottom, or by the spaces contain'd between line and line side-ways, or from the left hand to the right: now the figures are always of the denomination is signified at the top of the column they belong to; & are equal to the rest of the figures they stand with between the same lines from right to left: as for example, to begin at the top, 3 inches are equal to a palm, 9 inches equal to 3 palms, equal to 1 span and so of the rest. So in a yard there is contained 2 cubits, 3 foot, 4 span, 12 palms, 36 inches, the other part of the Table contains square measures or superficial, and the way of using it is the same with the former; as for example, 144 square inches are equal to 1 foot square. 1296 inches are equal to 9 feet, or 1 yard square. Those figures that come after such a mark as this L the first of them stand for the 10th part the 2 for the hundred part.

<i>Acres</i>										4	160	174	29	4	840	43560	6272640
<i>Rood</i>										40	4356	1210	10890	1568160			
<i>Pole</i>										1089	304	2724	39204				
<i>Face</i>										277	25	36000					
<i>Yard</i>										9	1295						
<i>Feet</i>												144					
<i>Inches</i>																	

<i>Table of Square Measure.</i>																	
<i>Table of Long Measure.</i>																	
<i>Table of Cubic Measure.</i>																	
<i>Table of Paces.</i>																	
<i>Table of Fathoms.</i>																	
<i>Table of Miles.</i>																	

<i>Table of Long Measure.</i>																	
<i>Table of Cubic Measure.</i>																	
<i>Table of Paces.</i>																	
<i>Table of Fathoms.</i>																	
<i>Table of Miles.</i>																	

<i>Table of Long Measure.</i>																	
<i>Table of Cubic Measure.</i>																	
<i>Table of Paces.</i>																	
<i>Table of Fathoms.</i>																	
<i>Table of Miles.</i>																	

In the Table of Long measure it is said a Pole or Perch is 16 $\frac{1}{2}$ feet, which is the Nature perch, besides which there are other perches or poles, as 78 feet for fen and wood-land, 31 for forrests, Lancashire and Irish measure, and 18 $\frac{1}{2}$ Scotch.

The

Swallow 1680.

The measure for horses is by the handfull equal to 4 inches.

In England we make use of 2 sorts of weights *Troy* and *Averdupoize*.

By *Troy* weight Gold, Silver, Jewels, Amber, Electuaries, Bread corn, and Liquors, are weighed, and from this *Troy* pound are taken all measures for wet and dry Commodities.

By *Troy* weights. are weighed all *Grocery* ware, and in short all manner of things that can waste: the Tables for *Troy* and *Averdupoize* must be used like the foregoing for measures :

		<i>Pound.</i>		12	240	5760
		<i>Ounc.</i>		20	480	
<i>Scruples</i>				<i>pen. W.</i>		24
3	<i>Drams</i>			<i>Troy weight.</i>		
24	8	<i>Ounces</i>		<i>Averdupoize weight.</i>		<i>Grains</i>
384	128	16	<i>Pound</i>			
43008	14336	1792	112	<i>Hund.</i>		
860160	286720	35840	2240	20	<i>Tun</i>	

Although the pound *Troy*, be bigger then the pound *Averdupoize*, yet the ounce *Troy* is lesser then the ounce *Averd.* the proportion of a *Troy* pound to *Averd.* pound being as 17 to 14, but of a *Troy* ounce to an *Averd.* ounce as 51 to 56.

A *Tun* weight *Averdupoize* is always 20 hund. of all things except Lead which is 19 hund. $\frac{1}{2}$.

Allom, Cinnamon, Nutmegs Pepper and Sugar have 13 l. $\frac{1}{2}$ to the stone, and 108 l. to the hundred. *Essex* Cheese or Butter the Clove is 8 pound, the *Wey* 32 Cloves, or 256 l. In *Suffolk* the Clove is 8 l. the *Wey* 42 Cloves or 336 l.

Swallow 1680.

Hay should have 20 hund. but is sold for 18 C. 36 truf-
ses or 2016 l. Wooll is sold by the Clove or half stone 7 l.
or by the stone 14 l. Tod 28 l. wey 182 l. Sack 364 l.
Laf 4368 l. Iron and shot are weighed 1 l. to the stone,
28 l. to the quarter, 112 l. to the hundred, 20 C. to the Tun.

A Faggot of Steel is 120 l. a burden of Gad Steel is 9
score or 180 l. for the weight of Butter and Sape 56 l. of
Butter, and 60 l. of Sape make a Firkin, and 4 firkins a Bar-
rel of either.

Dry Measures of capacity are raised from the Gallon
containing 8 pints, which should be contain'd in 272 $\frac{1}{2}$
Cubick inches, and should hold of pure running Water 9 l.
13 oun. 12 dra. $\frac{1}{2}$ of *Averd.* weight.

Pints									
8	G-l.								
16	2	Pec.							
64	8	4	Busb.						
128	16	8	2	Strik					
256	32	16	4	2	Coomb				
512	64	32	8	4	2	Coomb			
3072	384	102	48	24	12	6	Wey		
5120	640	320	80	40	20	10	12	Last	
A	1 l.	8 l.	16	64	128	256	512	3072	5120
B	14 oun.	7 l.	14	56	112	224	448	2816	4480

This Table is exactly of the same nature with the former,
only at the bottom are added 2 spaces mark'd with A and
B, in the line A is express'd the respective Measures weight
of wheat in Troy weight, in the line B in *Averd.* for example
a peck of wheat weighs 16 Troy, 14 *Averd.* and so for the rest.

Meal is weighed as Corn, but the common repute is
that a gallon of Wheaten Meal, weighs 7 l. *Averd.* and
8 l.

Swallow 1680.

8 l. 6 oun. 4 pen. weight Troy, and so a Bushel 36 l. *Averd.* and 68 l. 1 oun. 12 pen. weight Troy. All other Grain, like-wise Salt, Lime, Coales, &c. follow this Measure which is called *Winchester* Measure. But when Sea Coale and Salt are measured with this Bushel, they are heaped, or else there is allowed five striked Pecks to the Bushel, and this is called *Water* measure, 36 such Bushells make a Chaldron of Coales; and on Ship-board they allow 21 Chaldron to the score.

Liquid Measure is either for Wine, or Ale and Beer measure; the Gallon for Wine measure contains 231 Cu-bical inches and should hold of running water, 8 l. 1 oun. 11 dra. *Averd.* and 9 l. 10 oun. 1 pen. weight Troy.

A Table of Wine measure, A Tun of Wine weigh-ing Averd. 17 c. weight one Pint 1 l. and half an ounce Troy.

Pints									
8		Gall.							
144	18	Runalet							
252	31 1/2	1 1/4	Barrel						
336	42	2 1/2	1 1/2	Terte					
504	63	3 3/4	2	1 1/2	Hogshead				
672	84	4 3/4	2 1/2	2	1 1/2	Puntion			
1008	126	7	4	3	2	1 1/2	Butt		
2016	252	14	8	6	4	3	2	Tun	

Swallow 1680.

In a Gallon for Ale or Beer there is 282 solid inches,
and it holds of pure water 101.3 oun. 1 1/2 dra.
Averdupoise.

Hog.	2	4	8	64	512
Bar.	2	4	32	256	
Kild.	2	16	128		
Firkin	8	64			
18 Gall.				8	
72	9	Firkin			
144	18	2	Kild.		
288	36	4	2	Bar.	
576	72	8	4	2	Hog.

Vessels for Butter, Fish, and Soap follow the Ale measure of a gallon, 8 Gallons make a Firkin, 2 Firkins a Kilderkin, 2 Kilderkins an Ale Barrel, and 12 Ale Barrels a Last.

A Table of Board and Timber measure with
the squares from 4 to 30 exactly
calculated.

Board measure.	Inches Quarters	Squares.	Timber measure.	Board measure	Inches Quarters	Squares.	Timber measure.
36 0 0	4	16	108 0 0	16 0 1	9	81	21 3 3
33 8 8	1	18	95 0 0	15 5 7	1	85	20 3 3
32 0 0	2	20	86 4 0	15 1 6	2	90	19 2 0
30 3 1	3	22	78 5 4	14 7 7	3	95	18 1 9
28 8 8	5	25	69 1 2	14 4 0	10	100	17 2 8
27 4 4	1	27	64 0 0	14 0 2	1	105	16 4 6
26 1 3	2	30	57 6 0	13 7 1	2	110	15 7 1
25 0 0	3	33	52 3 6	13 3 9	3	115	15 0 3
24 0 0	6	36	48 0 0	13 0 9	11	121	14 2 8
23 0 4	1	39	44 3 0	12 8 0	1	126	13 7 1
22 1 5	2	42	41 1 4	12 5 2	2	132	13 0 9
21 3 3	3	45	38 4 0	12 2 9	3	138	12 5 2
20 5 7	7	49	35 2 6	12 0 0	12	144	12 0 0
19 18 0	1	52	33 2 3	11 7 5	1	150	11 5 2
19 2 0	2	56	30 8 6	11 5 2	2	156	11 0 8
18 5 8	3	60	28 8 0	11 2 9	3	162	10 6 7
18 0 0	8	64	27 0 0	11 0 7	13	169	10 2 2
17 4 5	1	68	25 4 1	10 8 7	1	175	9 8 7
16 9 4	2	72	24 0 0	10 6 7	2	182	9 4 9
16 4 0	3	76	22 7 4	10 4 7	3	189	9 1 4

Swallow 1680.

Board measur.	Inches Quarters	Squares.	Timber measur.	Board measur.	Inches Quarters.	Squares.	Timber measur.
10 2 8	14	169	8 8 1	8 6 21	441	3 2 2	
10 1 0	1	203	8 5 1	8 7 7	451	3 8 3	
9 9 3	2	210	8 2 3	8 6 9	462	3 7 4	
9 7 0	3	217	7 9 6	8 6 2	473	3 6 5	
9 6 4	15	225	7 6 8	8 5 4	484	3 5 7	
9 4 0	1	232	7 4 4	8 4 7	495	3 4 9	
9 2 9	2	240	7 2 0	8 4 0	505	3 4 1	
9 1 4	3	248	6 9 7	8 3 3	517	3 3 4	
9 0 0	16	256	6 7 5	8 2 6	529	3 2 7	
8 8 6	1	264	6 5 4	8 1 9	540	3 2 0	
8 7 5	2	272	6 3 5	8 1 2	552	3 1 3	
8 6 0	3	280	6 1 0	8 0 6	564	3 0 6	
8 4 7	17	289	5 9 5	8 0 0	576	3 0 0	
8 3 5	1	297	5 8 1	8 9 4	588	2 9 3	
8 2 3	2	305	5 6 4	8 8 2	600	3 8 8	
8 1 1	3	315	5 4 8	8 2 3	612	2 8 2	
8 0 0	18	324	5 3 3	8 7 6	625	2 7 6	
7 8 5	1	333	5 1 9	8 7 0	637	2 7 1	
7 7 5	2	342	5 0 5	8 6 3	650	2 6 5	
7 6 5	3	351	4 9 2	8 5 9	662	2 6 1	
7 5 8	10	361	4 7 9	8 5 4	676	2 5 5	
7 4 8	1	370	4 6 7	8 4 8	689	2 5 1	
7 3 9	2	380	4 5 5	8 4 3	702	2 4 6	
7 2 9	3	390	4 4 3	8 3 3	715	2 4 2	
7 2 6	20	400	4 3 2	8 3 3	729	2 3 7	
7 1 1	1	410	4 2 1	8 2 3	749	2 3 2	
7 0 2	2	420	4 1 1	8 2 3	756	2 2 8	
6 9 4	3	431	4 0 1	8 1 9	767	2 2 5	

Board measur.	Inches Quarters.	Squares.	Timber measur.	Board measur.	Inches Quarters	Squares.	Timber measur.
5 1 4	28	784	2 2 0	4 3 6	33	1089	1 5 9
5 0 9	1	798	2 1 0	4 3 3	1	1104	1 5 6
5 0 5	2	812	2 1 2	4 3 0	2	1122	1 5 4
5 0 0	3	826	2 0 9	4 2 7	3	1139	1 5 2
4 9 6	29	841	2 0 5	4 2 3	34	1156	1 4 9
4 9 2	1	855	2 0 2	4 2 0	1	1173	1 4 7
4 8 8	2	870	1 9 8	4 1 8	2	1190	1 4 5
4 8 4	3	885	1 9 5	4 1 4	3	1208	1 4 3
4 8 0	30	900	1 9 2	4 1 1	35	1225	1 4 1
4 7 6	1	915	1 8 9	4 0 8	1	1242	1 3 9
4 7 2	2	930	1 8 6	4 0 5	2	1260	1 3 7
4 6 8	3	945	1 8 3	4 0 3	3	1278	1 3 5
4 6 4	31	961	1 7 9	4 0 0	36	1296	1 3 3

The Explanation and use of the Table.

THE Table consists of two principle Columns, and these two are again divided each Column into four, so that it consists of eight Columns.

The first of which is intitled Board measure, shews how many Inches in length are required to the making of a Foot of Board according to the breadth given.

The second, entituled, Inches and Quarters, contains the

the breadth in Inches and Quarters, beginning at 4 Inches and proceeding thus, 4. 1, 2, 3. which are 4 Inches $\frac{1}{4}$ $\frac{1}{2}$ & $\frac{3}{4}$ of an Inch, and so likewise of the rest.

The third entituled Squares, shews the *area* or content of a Square whose side are the inches and parts of Inches standing equal with the said Square Inches.

The fourth, entituled Timber measure shews how many Inches and parts of Inches make a Foot of Timber according to the side of the Square given, or the content of its base. The other four Columns are of the same nature with the former explained, and therefore I shall proceed to the use of the Table.

The use of the Table Exemplified.

First suppose I have a Board 13 Inches and $\frac{1}{4}$ broad, and I desire to know how much in length thereof will make a Foot: first, I seek in the Column entituled, Inches and Quarters for 13 and $\frac{1}{4}$ and against the same under the title of Board measure, I find 10 Inches, 6 primes, and 7 seconds will make a Foot at that breadth, the like may be practised for any other breadth of Board or Glass, or Cicleing, or Pavement: and if you desire to know how many Bricks will floor a Room, first find the area or content of the floor in square Inches, and then find the content of one Brick divided thereby, and the quotient will shew you how many Bricks will suffice for the flooring of the Room, you may also by the help of the Column of Squares readily find a square equal to the base of any Paralelepipedon or piece of Timber, which is thicker than it is broad, *exemp. gr.* Suppose a piece of Timber to be 8 Inches thick and 12 Inches broad, if I multiply these sides one by another, the product will be

be 96 the content of the base of the Parallelepipedon
 which seeking in the Column of Squares I find not, but
 I find 55 the nearest to it standing against 9 Inches and
 $\frac{1}{2}$ therefore I say, 9 Inches and $\frac{1}{2}$ *ferd* will make the
 side of a square board whose area will be equal to the
 Parallelogram, or base of the Parallelepipedon aforesaid,
 now looking into the Column of Timber measure right
 against this 9 Inches and $\frac{1}{2}$ I find 18 Inches, 1 prime,
 9 seconds, which is the length of a Foot of that piece
 of Timber according to the aforesaid thickness or con-
 tent of its base. You may likewise see by this Table how
 to reduce a parallelogram into a square, or to perform
 many such like things of good use, and with much de-
 light, and as profitable.

Some short fundamental Rules of measuring
 Superficies and Solids, and how to
 measure Round Timber.

First for a Parallelogram or a figure that is Longer than
 it is broad, multiply both the sides one by the other,
 and you shall have the content, as suppose the length be
 20 and the breadth 9, the multiplied produce 180 the
 content sought.

The area of a Triangle is produced by multiplying
 half the base into the height, or the base into half the
 height, because every Triangle is equal to half the Paral-
 lelogram of the same height and length, and under the
 same parallels, as suppose a Triangle whose base is 20
 the length of the former Parallelogram and the height
 9 the breadth thereof, now 10 into 9 makes 90 the
 area of the Triangle.

Thus you may do with any irregular figure by dividing
 it into Triangles, and then finding their contents add them
 together and you shall have the content of the whole.

To

To measure Circles.

THe area of a Circle is produced by multiplying half the Circumference into the Semidiameter, as suppose the half Circumference is 9 and the Semidiameter 3 these multiplied produce 27 the area or content sought. For every Circle as *Archimedes* demonstrates, is equal to the Triangle, whose Base is equal to the Circumference, and height equal to the Semidiameter of the Circle.

The Proportion of a Circle to the Square of the Diameter is as 11 to 14 *first* therefore by the Rule of three, say as 11 to 14; see the area of the Circle suppose 27 to the Square about the Circle, multiply 27 by 14 and divide by 11 and the Quotient shews you your desire.

The Diameter of a Circle given to find the Circumference.

THe Proportion will be as 7 to 22 so the Diameter suppose 28 to 88 the Circumference, which is effected by multiplying 28 by 22 and dividing by 7 according to the Rule of three.

In like manner having the Circumference you may find the Diameter only by converting the terms, saying as 22 to 7, so 88 the Circumference to 28 the Diameter, so that the Circumference of a Circle is 22rd of the Diameter and about $\frac{1}{7}$ of it.

To make a Square equal to a Circle, extract but the Square root of the content, and you will have the side of a Square equal to the Circle; or by the foregoing Table look for a Square number equal to it, and that which comes nearest to it, under the title of Squares and right against it

under the title of Inches and Quarters you will find the side.

The Square within the Circle is equal to half the Square without, therefore take half the content of the Square without, and extract the Square root or find the side of it in the foregoing Table by looking among the Squares, you will find the side answering to it under the title of Inches and Quarters, as for example, suppose the content of the Square without be 800 Inches or Feet, half of this is 400, then looking 400 under the title of Squares you will find 20 standing against it which is the side of that Square which is to be inscribed within the Circle. And note that if you enter the Table with Feet you will be answered with Feet and parts of a Foot, if with Yards, Yards and parts of a Yard, &c. and note likewise that what hath been said of Boards may be applied to any the like Superficies as Land, Wainescot, &c.

For the measuring of round Timber or Stone, &c. you must know that round Timber represents Cylinders, now the Solidity of a Cylinder is found by multiplying the content of the Base which is a Circle by the height, and the product gives the content or Solidity, as if the Base be 27 the height 6 these multiplied produce 162. The Solidity of a Cylinder or round piece of Timber, in like manner are Prisms measured.

Cones and Pyramids are the third part of Cylinders, and Prisms, representing taper Timber, their Solidity is found by multiplying the content of their Bases by the third part of their height by finding the content of the Base of the Cylinder or round piece of Timber, you may by the former Table find how many Inches in length of that piece will make a Foot Solid, as suppose the area of the base be 27, look 27 under the title of Squares, and right against it in the row of Timber measure stands 64 the length of a Foot Solid.

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A plain and easie Table shewing the true Interest due upon any sum of money from five shillings to an hundred pounds for a year or under, after the rate of six pounds in the hundred.

		1 Mon.			3 Mon.			6 Mon.			9 Mon.			A year.		
		£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.	£.	s.	d.
5 Shill.	5	0	0	1	0	0	3	0	1	3	0	2	2	0	3	2
	10	0	0	2	0	1	3	0	3	2	0	5	2	0	7	0
	15	0	0	3	0	2	2	0	5	1	0	8	0	0	10	2
Pounds.	1	0	1	0	0	3	1	0	7	0	0	10	2	1	2	1
	2	0	2	1	0	7	0	1	2	1	1	9	1	2	4	2
	3	0	3	2	0	10	2	1	9	1	2	7	3	3	6	3
	4	0	4	3	1	2	1	2	4	2	3	6	3	4	9	0
	5	0	6	0	1	6	0	3	0	0	4	6	0	5	0	0
	6	0	7	0	1	9	2	3	7	0	5	4	2	7	2	1
	7	0	8	1	2	1	0	4	2	1	6	3	1	8	4	2
	8	0	9	2	2	4	2	4	9	1	7	1	3	9	6	3
	9	0	10	3	2	8	1	5	4	2	8	0	3	10	9	0
Tens of Pounds.		£.	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.
	10	0	1	0	0	3	0	0	6	0	0	9	0	0	12	0
	20	0	2	0	0	6	0	0	12	0	0	18	0	1	4	0
	30	0	3	0	0	9	0	0	18	0	1	7	0	1	16	0
	40	0	4	0	0	12	0	1	4	0	1	16	0	2	8	0
	50	0	5	0	0	15	0	1	10	0	2	9	0	3	0	0
	60	0	6	0	0	18	0	1	16	0	2	14	0	3	12	0
	70	0	7	0	1	1	0	2	2	0	3	3	0	4	4	0
	80	0	8	0	1	4	0	2	8	0	3	12	0	4	16	0
	90	0	9	0	1	7	0	2	14	0	4	1	0	5	8	0
	100	0	10	0	1	10	0	2	0	0	4	10	0	6	0	0

Find your principall in the second Column, and right against the same is the interest due for one, three, six, nine, or twelve moneths.

A Table of the hour and minute of Sun-rising every second day.

days	Januar.	Februa.	March	April	May	June
	ho. mi.	ho. mi.	ho. mi.	ho. mi.	ho. m.	ho. mi.
2	5 4	7 15	6 16	5 14	4 21	3 46
4	8 1	7 11	6 12	5 10	4 17	3 45
6	7 58	7 7	6 8	5 6	4 14	3 44
8	7 56	7 3	6 4	5 2	4 11	3 43
10	7 53	6 57	6 0	4 58	4 7	3 43
12	7 51	6 53	5 56	4 54	4 5	3 43
14	7 48	6 50	5 52	4 50	4 2	3 43
16	7 45	6 46	5 48	4 46	4 0	3 44
18	7 43	6 42	5 44	4 43	3 58	3 45
20	7 40	6 38	5 40	4 39	3 56	3 46
22	7 37	6 34	5 36	4 35	3 54	3 47
24	7 33	6 30	5 32	4 32	3 52	3 48
26	7 29	6 26	5 29	4 29	3 50	3 49
28	7 25	6 22	5 25	4 25	3 48	3 50
30	7 21	6 0	5 21	4 22	3 47	3 52
days	July	August	Septem.	Octob.	Nov.	Decem.
	ho. mi.	ho. mi.	ho. mi.	ho. mi.	ho. m.	ho. mi.
2	3 54	4 39	5 39	6 41	7 37	8 15
4	3 56	4 43	5 42	6 45	7 40	8 15
6	3 58	4 46	5 46	6 49	7 44	8 16
8	4 0	4 50	5 50	6 52	7 47	8 17
10	4 3	4 54	5 54	6 56	7 51	8 17
12	4 6	4 58	5 58	7 0	7 54	8 17
14	4 8	5 2	6 2	7 4	7 57	8 17
16	4 11	5 6	6 6	7 8	7 59	8 16
18	4 15	5 10	6 11	7 12	8 1	8 15
20	4 18	5 14	6 15	7 15	8 3	8 15
22	4 21	5 18	6 20	7 19	8 5	8 14
24	4 24	5 21	6 24	7 22	8 7	8 13
26	4 27	5 25	6 28	7 25	8 9	8 10
28	4 30	5 29	6 32	7 29	8 11	8 9
30	4 34	5 32	6 36	7 32	8 13	8 7

Seek the day on the side; and right against it, in every month, you have the hour and minute of Sun-rising.

Look how many minutes the Sun rises after 3, 4, 5, 6, 7, 8.

So many he sets before 9, 8, 7, 6, 5, 4.

C

A

A Table of Annuities and Reversions.

<p>What 1 pound to 30 pound in any number of years hence, is worth in ready money.</p>	<p>What 1st Annuity to continue any time under 31 years is worth in ready money at 6 per cent.</p>
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	sh.	d.	q.		lb.	sh.	d.	q.
1	18	10	2	1	0	18	10	2
2	17	9	2	2	1	16	8	0
3	16	9	2	3	2	13	5	2
4	15	10	0	4	3	9	3	2
5	14	11	1	5	4	4	3	0
6	14	1	1	6	4	18	4	1
7	13	3	2	7	5	11	7	3
8	12	6	2	8	6	4	2	1
9	11	10	0	9	6	16	0	1
10	11	2	0	10	7	7	2	1
11	10	6	2	11	7	17	8	3
12	9	11	1	12	8	7	8	0
13	9	4	2	13	8	17	0	2
14	8	10	0	14	9	5	10	3
15	8	4	1	15	9	14	3	0
16	7	10	2	16	10	2	1	2
17	7	5	0	17	10	9	6	2
18	7	0	0	18	11	16	6	2
19	6	7	1	19	11	3	2	0
20	6	2	3	20	11	9	4	3
21	5	10	2	21	11	15	3	1
22	5	6	2	22	12	0	10	0
23	5	2	3	23	12	6	0	3
24	4	11	1	24	12	11	0	0
25	4	7	2	25	12	15	8	0
26	4	4	3	26	13	0	0	3
27	4	1	3	27	13	4	2	2
28	3	11	0	28	13	8	1	2
29	3	9	1	29	13	11	9	3
30	3	5	3	30	13	15	3	2

The use of these Tables are both after a manner, for finding what one pound will yield, you may by multiplication know what 5th or 10th or 100th will yield.

As for Example.

A Lease or Annuity being worth 30th per annum which is to continue 20 years, what may the value thereof be in ready money? You may see by the last Table that one pound Annuity to continue twenty years is worth 11th 9th 4th 3th which multiply by 30 and you shall have your desire.

Note that the first Table shews what one pound to be paid any number of years hence is worth in ready money that is when the interest of the yearly decrease is deducted, or Rebated.

The second, what one pound yearly continuing is worth, the interest in like manner being deducted.

Note also that the fundamental for Rebate is thus, say as 100th to 100, so 100th to 94 6 9th.

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A Table shewing how to find Easter for ever
by the help of the Golden Number
and Dominical Letter.

G.N.	A	B	C	D	E	F	G
i	Apr. 9	10	11	12	6	7	8
ii	Mar. 26	27	28	29	30	31	Apr. 1
iii	Apr. 16	17	18	19	20	21	22
iv	Apr. 9	3	4	5	6	7	8
v	Mar. 26	27	28	29	30	31	2
vi	Apr. 16	17	18	19	20	21	3
vii	Apr. 3	3	4	5	6	7	4
viii	Apr. 23	24	25	26	27	28	5
ix	Apr. 9	10	11	12	13	14	6
x	Apr. 2	3	4	5	6	7	7
xi	Apr. 16	17	18	19	20	21	8
xii	Apr. 9	10	11	12	13	14	9
xiii	Mar. 26	27	28	29	30	31	10
xiv	Apr. 16	17	18	19	20	21	11
xv	Apr. 3	3	4	5	6	7	12
xvi	Mar. 26	27	28	29	30	31	13
xvii	Apr. 16	17	18	19	20	21	14
xviii	Apr. 3	3	4	5	6	7	15
xix	Apr. 23	24	25	26	27	28	16

Yea. of our Lord	1680	1681	1682	1683	1684	1685	1686
------------------------	------	------	------	------	------	------	------

G.N.	9	10	11	12	13	14	15
------	---	----	----	----	----	----	----

D.Le.	DC	B	A	G	F	E	D
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The foregoing Table explained.

By the former Table you may easily find *Easter*, (and from thence the other Moveable Feasts) in any year to come. The use is thus, You must first know the Golden Number and Dominical Letter for that year in the which you would know when *Easter* will fall, which you may find for 7 years at the bottom of the Table, then enter the Table with the Golden Number in the first Column and the Dominical Letter at the top, and in the common Angle is the day of the month whercon *Easter* falleth that year.

Example, this year 1680 the Golden Number is 9, the Dominical Letters DC. I find 9 in the first Column, and (there being two Dominical Letters because it is Leap-year,) I go right forward from 9 till I come under the last of them which is C. and there I find *April 11*, upon which day *Easter* falleth this year, thus do for any Leap-year, but for the intermediate years as was shewed before.

Having found *Easter*, you may from thence find the other Moveable Feasts, Shrovesund is 7 weeks before *Easter*, Rogation-sunday 5 weeks after *Easter*, The Thursday after Rogation is Ascension day, 7 weeks after *Easter* is Whitunday, the Sunday following is Trinity-sunday, the Thursday after that is *Corpus Christi*.

Advent-sunday, is always the nearest Sunday to the Feast of S. Andrew, whether it be before it or after it.

The Names of the principal Fairs in *England*,
as they have heretofore been set forth by others,
and are now Corrected and continued for the
common good.

January.

THe 5 day at Hicetford in Lancashire, the 6 day at Salis-
bury, Tuesday after at Melton, Mowbray, the Thurs-
day after at Banbury: the third Tuesday in January at
Potton: the 25 at Gravesend, Bristol, Churchisford, Nor-
thallerton in Yorkshire every Wednesday from Christ-
mas till June.

February.

The 1 day at Bromley in Lancashire, the 1 at Reading
in Barkshire, at Maidston, Bicklesworth, Bicklesfield, Bath,
Lyn, Bagworth: the 6 day at Stafford for 6 days: the
14 at Oundle, Feversham: 24 at Henley upon Thames,
Baldock: On Ashwednesday at Royston, Dunstable,
Eaton, Tamworth, Tunbridg, Lichfield, Exeter, Ciceter.
The first Thursday in Lent at Banbury: the 26 at Stanford
an Horse Fair.

March.

The 3 day at Bromel-brakes in Norfolk, 4 at Bedford, at
Oakham: 12 at Alsome in Norfolk, Sudbury, Wooburn,
Stanford, at Wye: 13 at Bodwin in Cornwall: 20 at
Durham, Alesbury: Munday before our Lady day at Ken-
dal, at Wisbich, 25 at Huntington, Northampton, Malden,
Ashwel in Hartfordshire, Newcastle, Oney, S. Albans:
Midlent Saturday at Saffron-walden: Palm Sunday-eve
at Wi bich, Worcester, Pomfret, on Goodfriday at Nor-
wich, the Tuesday before Easter at Potton.

April.

Easter Munday at Oney in Bedfordshire, Gainsborough.
Easter Tuesday at Daintry in Northamptonsh. Godman-
chester,

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chester, Schole in Norfolk, S. Edmunds bury. On Wednesday at Wellingborough in Northamptonsh. On Friday in the same week at Darby. On Saturday at Bickleworth: 2 day at Hitchin, at Rochford, Northfleet: 5 at Wallingford: 7 at Derby, 9 at Billingsworth, Bickleworth: the 22 at Stabford, 23 at Ipswich, Harbin in Norfolk, Northampton, Sapfar in Hartfordshire, Charing, Hinningham, Tamworth, Bury in Lancashire. S^t Pombs in Cornwall, Ampthill, Chichester, Engfield, Gilsford, Bishops-Hatfield: the 25 at Buckingham at Bourn in Lincolnsh. at Colebrook. Dunmow in Essex, Darby, Oakham in Rutlandshire: the 29 at Tenderden in Kent, Cloet. 30 at Beverly a week together.

May.

The 1 day at Swaffam, Haveril in Essex, Laytonbuzzard in Huntingdonsh. Rippon in Yorksh. Reading, Maidstone, Chelmsford, Leicester, Litchfield, Lexfield in Suffolk, Stow, Stansted, Tuxford in the Clay, the 3 day at Elstow in Bedfordsh, Nuneaton in Warwicksh. Thetford in Norfolk, Waltham Abby, Hinningham, Rochdale, Bramyard the 6 at Almesbury, at Athford, 7 at Newton in Lancashire, Beverly, Oxford, Bath: the 8 at Maidstone: the 19 at Rochester, Dunstable, Magfield in Suffolk. On Rogation Munday at Reach. On Ascension day at Thaxted, Beverly, Rippon, Sudminster, Bishopstratford, S. Neots, Wickham in Lancashire, Middlewich in Cheshire, Chappel-Frith in Darbish. On Whitsun-even at Skipton in Craven. On Whitsun-Munday at S. Ives, Rygate in Surry, Bickleworth, Bradford, Agmounsham in Buckinghamsh. On Whitsun-Tuesday at Newmarket. On Wednesday at Royston. Thursday at Oundle in Northamptonsh. 26 at Lenham, 29 at Crainbrook.

June.

Trinity-even at Rowel, Kendal. On Corpus Christi day at Banbury, Bishopstratford, S. Neots, Coventry, Newbury. The 3 at Alesbury: 9 at Maidstone. 11 at Breme in Norfolk, Bardfield in Essex, 17 at Hadstock, 23 at S. Albans,

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bans, Deerham in Norfolk, Shrewsbury, 24 at Halsen in Suffolk, Barnwel by Cambridge, Bedford, Colchester, Hartford, Leicester, Rumford, Reading, Windsor, Halifax, York, Beverly, Hallingden, 26 at Bristol, Darby, 27 at Burton on Trent, Follstone 28 at S. Pombs in Cornw., 29 at Peterborough, Ashwel, Sudbury, Stebbing in Essex, Benington in Hertfordshire.

July.

The first Tuesday at Potton. The 1, 2, 3 days at Conglestone in Cheshire, 7 at Royston, Burnwood. The Monday after at Fodringham, at Canterbury: the 11 at Partney, 17 at Stevenage: 20 at Uxbridge, Coolidge, Woodstock: the 22 at Ickleton, Bicklesworth, Norwich, Colchester Newark upon Trent; 25 at Audley-end by Walden, Reading, Baldock, Darby, Dover, Erith, Ipswich, Stamford.

August.

The first day at Pedford, S. Neots, Dunstable, Faversham, Wisbich, Bicklesworth. Thaxted: the 6 at Peterborough: the 10 at Blackmore. Harply in Norfolk, S. Ives, Bedford, Banbury, Farnham, Brainford, Oundle: the 13 at Cambridge, Huntington, Dunmow, Luton, Northampton: the 24 at London, Sudbury, Norwich, Oxford, Northallerton, Dover, Beggers-bush, Burton, the 28 at Ashford, Daintry: the 29 at Halsen in Suffolk, Harlow-Bush in Essex, Watford.

September.

The first day at S. Giles in the Bush. On Thursday and Friday before the 8 day at Sandback in Cheshire. 7, 8, 9, 10 at Woodbury-hill in Dorsetshire, 7 at Ware. 8 at Huntington, Bury in Lancashire, Partney, Wakefield, Northampton, Sturbridge fair begins: the 11 at Wolfpit in Suff. 14 at Rippon, Waltham-Abby, Chesterfield in Derbyshire, Richmond: the 21 at Marlborough, Bedford, Baldock, Edmundsbury, Holden in Holderness, Braintry, Brackly-Maiden, Malden, Mildna: the 29 at S. Ives, Basingstoke, Marketdeeping, Shelford in Bedfordsh. Bishopstortford, Malden,

Swallow 1680.

Malden, stow in Lincolnsh. S. Albans, Canterbury, Leicester, Newbury, Westchester, Weymer for 7 days: Thursday after at Banbury.

October.

The 1 day at Salisbury, the 6 at Havent in Hampsh. Mardone, Coolidge, Gayworth by Lyn. S. Faiths by Norwich, the 8 at Bishopstratford, Harborough, 9 Gainsborough, the 13 at Windsor, Colchester, Gravesend, Hitchin, Roytton: the Tuesday before S. Luke at Potton: 18th Ely, Bishop Hatfield, Barnet, Banbury, Thirst, Burton on Trent, Wellinborough: the 21 at Saffron Walden, Coventry: the 23 at Bickleworth, 28 at Newmarket, Hartford, Oxford, Difs, Wakefield, Stamford, Richdale in Lancashire.

November.

The 1 day at Chelmsford, 2 at Epping, Kingston in Thames, Padamhaston in Suffolk, 6 at Newport pond, Bedford, Hartford, 11 at Lodden in Norfolk, Lenton in Nottinghamshire, Hempton, Fockingham, Bridgestock, Marlborough: the 17 at Spalding in Lincolnsh. Lincoln, Harlow, Hide, Northampton: the 19 at Horsham in Kent: the 22 S. Edmundsbury, Ingerston in Essex, Heath, the 23 at Sandwich, the 30 at Baldock. Bareford, Kolingborough, Mordenhead, Warrington, Rochester, Wakefield, York.

December.

The first day at Turbury: the 5 at Pluckley: the 9 at S. Neots, at Woodstock, Exeter, Spalding, Norwich in Cheshire. Seven-oak in Kent, Arundel, Grantham: the 7 at Sandhurst, the 8 at Northampton, Clitheral in Lancashire, Huptington, Leicester, at Malpas in Cheshire: the 19 at Canterbury, Salisbury.

FINIS.